
Living and
Working
in Space
International Space Station Overview
NASA

April 18, 2004 10:19 pm CDT
Baikonur Cosmodrome, Kazakhstan

Launch of Expedition 9

Mike Fincke
Flight Engineer and
NASA Science Officer

Gennady Padalka
Commander


Crew Exchange

Return of Expedition 8 aboard Soyuz 7

April 29, 2004 7:12 pm CDT - Kazakhstan

International Space Station

A human outpost in space bringing nations together for the benefit of life on Earth… and beyond.

We will make revolutionary discoveries and establish a permanent international presence of humans in space, to advance the exploration of the solar system and enable commerce in space.

Program *Vision*

International Space Station

Safely build, operate, and utilize a continuously inhabited orbital research facility through a partnership of governments, industries, and academia.

Program Mission

The International Space Station is more powerful, and 4 times larger, than any human space craft ever built.

It is 171 ft. long, 240 ft. wide (solar array larger than the wingspan of a 777), 90 ft. high, weighs 197 tons (400,000 lbs.) and has 15,000 cubic feet of habitable living space (equivalent to a 3 bedroom house).

ISS plans include micro gravity science laboratories from four space agencies. U.S. Lab “Destiny” operating since Feb. 2001.

ISS flies in an orbital inclination of 51.6 degrees, approximately 240 miles above the Earth, in a path that covers 90% of the world’s population. It is visible to the naked eye.

ISS travels at the speed of 17,500 miles per hour, and covers the equivalent distance to the Moon and back in a day.

ISS Multi-dimensional challenges

Integrating International Partners

Engineering Excellence

Prioritizing Science

24/7 Space Operations

Organization, Budget, and People

Over 100 people have visited the ISS so far, 17% for the second time.

16 International Participants

5 International Partners

United States

Russia

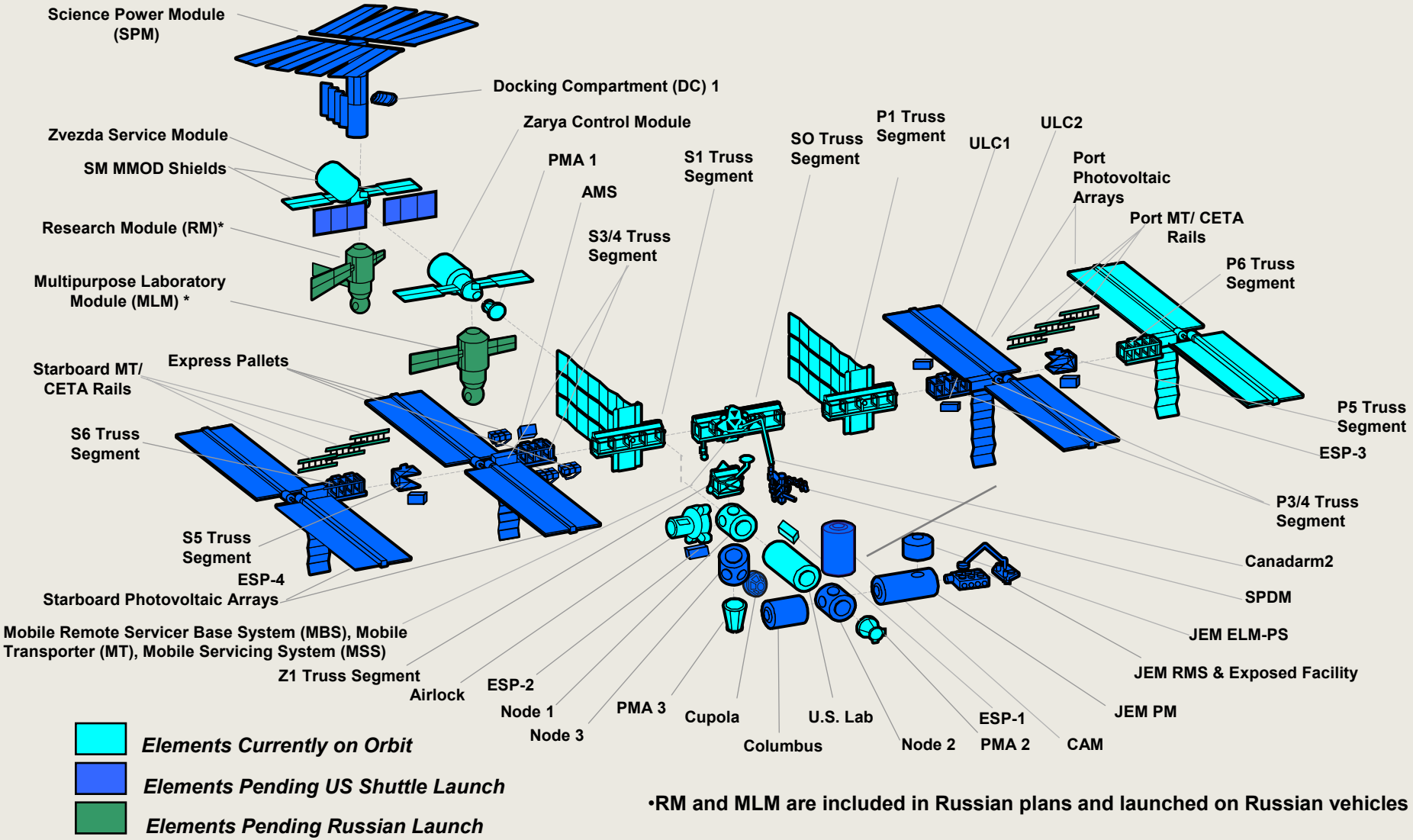
Canada

Europe

Japan

ISS Technical Configuration

Endorsed by ISS Heads of Agency on July 23, 2004



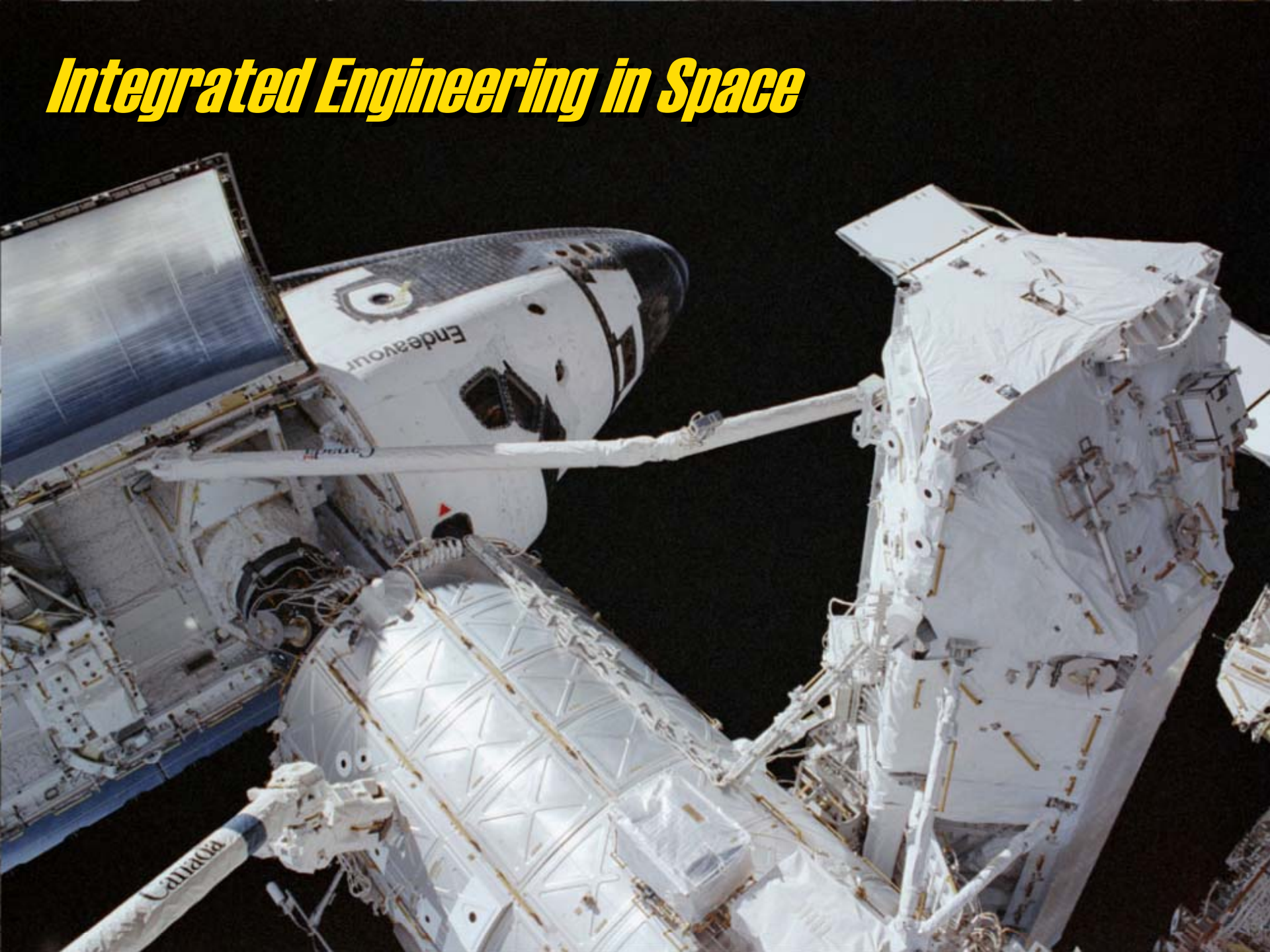
Elements Currently on Orbit

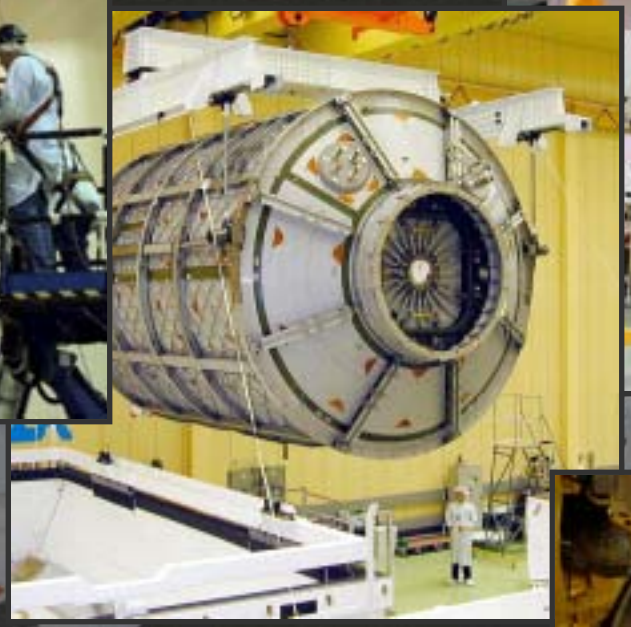
Elements Pending US Shuttle Launch

Elements Pending Russian Launch

•RM and MLM are included in Russian plans and launched on Russian vehicles

Integrated Engineering in Space





Elements are invented around the world and come together in space with hairline tolerance